33334

TV COLOR TELEVISION

ST 72 - 764 SAT
ST 72 - 764 MD/SAT

(D) = Seite 2 (GB) = Page 27 (F) = Page 52 (I) = Pagina 77 (NL) = Pagina 102

GRUNDIG

33334

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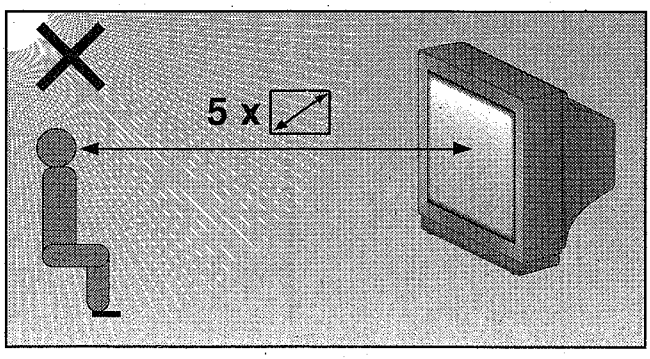
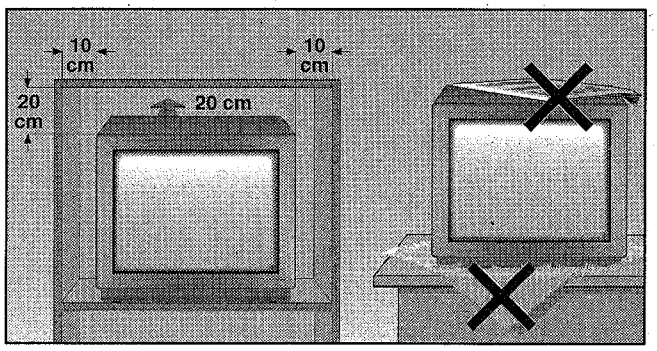
Safety and Setting Up



When setting up your television, select a location where as little light as possible falls on the screen.

The ideal viewing distance is five times the diagonal width of the screen.



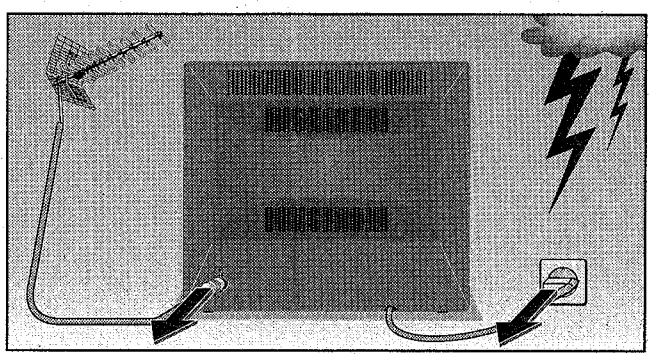
If the television is to be built into a wall unit, the specified minimum distances must be maintained.

Do not cover the ventilation slots on the back.

Heat build-up can be dangerous and can reduce the service life of your television.

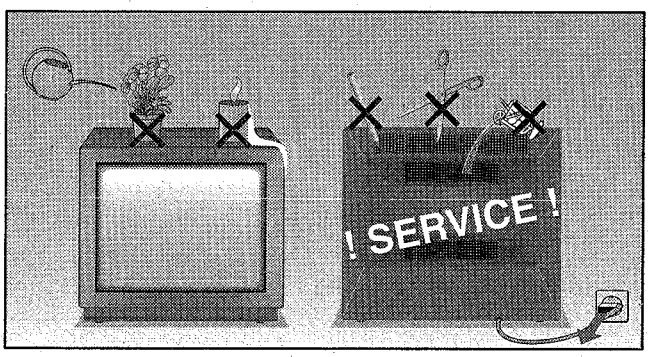
Never place the television near heat sources.

Never place speakers next to the television.



If you do not use your television for longer periods of time (including over night), switch it off with the mains switch ①. This saves energy.
Attention when the timer has been programmed!

Even if your television is switched off it can still be damaged by a lightning strike in the power supply or aerial cables.
For this reason, you should always disconnect your television from the mains as well as the aerial cable during thunder storms.



Your television must never be exposed to water in any way.
Never put anything into the ventilation slots on the back – High Voltage!

ST 72-764 SAT: This unit is equipped with the new super flat Megatron picture tube with a coated surface.

This coating both increases the contrast and reduces reflection.
A further advantage of this coating is its antistatic effect. Static charges cause the attraction of dust particles, an effect which the screen´s coating works to avoid to a large extent.
Always clean the screen of your television with a soft, damp cloth.
Use only clean water.
When cleaning the screen do not press on it as the coating may be rubbed off or scratched.
Never stick any kind of adhesive labels on the screen.

Connecting and Preparing the Unit

Connecting the Unit

Connecting the Unit to the Aerials

Put the plugs of the aerial cables into the sockets (SAT ⊠, terr. Y) on the television unit.

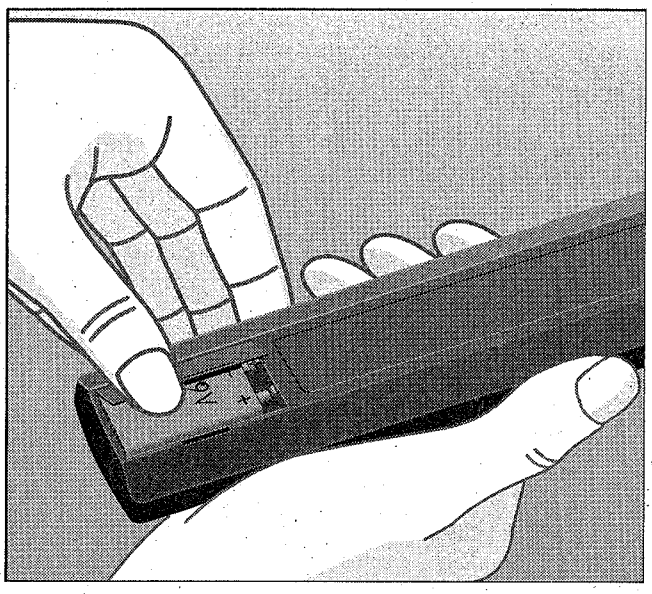
Connecting the Unit to the Mains Supply

Put the plug of the mains cable into the plug socket.

Inserting the Battery into the Remote Control

All important control functions and basic settings can be carried out with the remote control.

Insert the battery provided, taking note of the pole markings in the base of the battery compartment
Replace the cover.



When the battery is dead » TELEPILOT BATTERY « appears on the screen for a short time.
Always replace weak batteries in good time. We can assume no liability for damage which may result from damaged batteries.
Dispose of used batteries property.

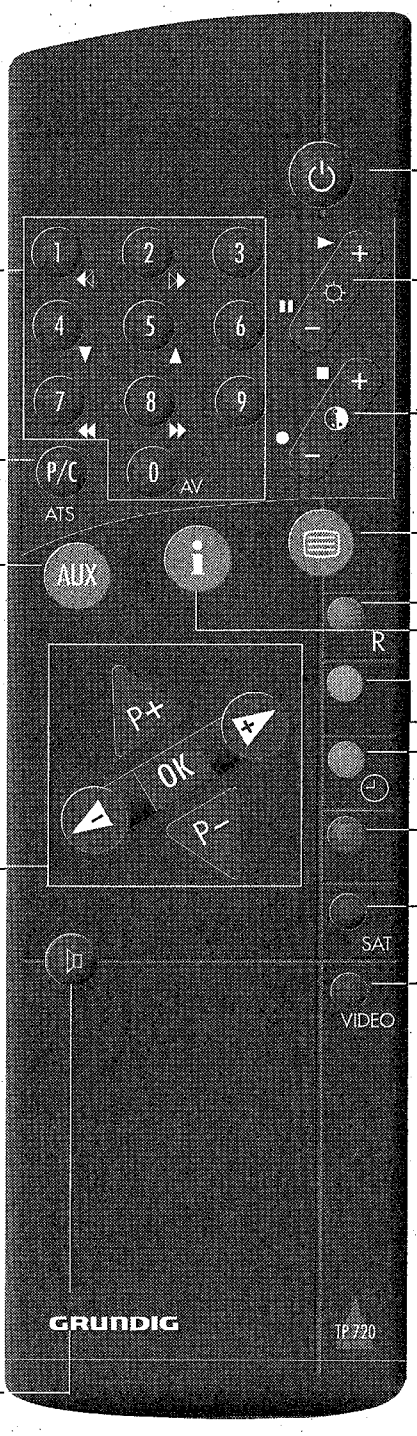
Switching On

Switch the television on with the power switch **IO** .
Channel position 1 is selected automatically and is shown on the display.
The screen shows the station identification (if entered) for a short time.

Volume Adjustment

If the pre-entered value set at the factory is too large or too small, i.e. if the volume is too loud or too soft, it can be changed with the buttons ◀ or ▶ on the remote control or with the setting buttons »Volume« + or –.

The Remote Control in TV/SAT Mode



① ... ⓪ Channel selection and switching on
⓪ AV the television from stand by as well as selection of AV position
Direct channel/frequency selection (after pressing P/C button)

P/C Pre-selection according to channel position
– for terrestrial stations, selection of Program/Channel/Special channel, Automatic search, Fine-tuning and Station Identification
– for SAT stations selection of Program, Polarisation, Frequency, Automatic Search, Video-/Audio Parameters and Station Identification

AUX Pre-selection for Copy operation, Headphone volume adjustment Mute, and Video-/ Audio-Parameter

P+ Indiviually switch channels (1, 2, 3 ...),

P- Individually switch channels (... 3, 2, 1),

"or"

P+ P- Move the cursor up, or down (select)

OK Call up the menu
Changing, activating and confirming various functions

◀ ▶ Volume adjustment

"or"

◀ ▶ Move the cursor to the left, to the right (select and change)

Access to » Audio menu « Sound ON/OFF (mute)

Switch to stand by LED on unit

Brightness

Colour contrast

Videotext/Teletext mode ↔ TV/SAT mode

R Radio mode ↔ TV/SAT mode
Start SAT and Radio Automatic Search

Access to menu.
Change programme sequence

Time On/Off

Videotext functions
Delete Channel Position

SAT External satellite receiver remote control (keep SAT button depressed)

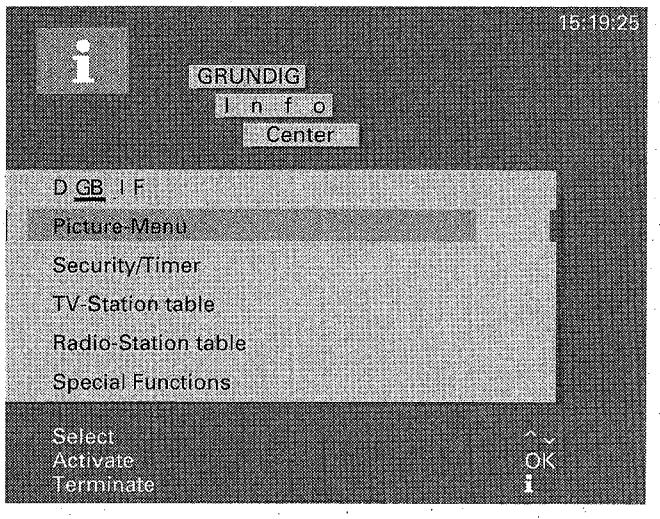
VIDEO Video recorder remote contro (keep VIDEO button depressed)

GRUNDIG Info Center

Using the » **GRUNDIG Info Center** « a variety of functions and settings can be carried out.

Calling up the GRUNDIG Info Center

Press ⓘ
Line **Menu -->** [OK],
Ton status for ex., **Stereo** and **Station Identification** appear on the screen.
Press [OK].
The GRUNDIG Info Center has been called up.



Always note the dialog lines (user prompts) at the bottom off the screen.
To return to the current television programme press ⓘ.

Selecting a language

Several languages can be selected for your dialogue with the television. Messages and instructions appear on the screen in the selected language.
D (German) is set at the factory.

The GRUNDIG Info Center has been called up.
Press P- or P+ and select the line »D GB I F«.
Activate the appropriate language buttons ◀ or ▶.
For further instructions see user prompts.

Assigning Channel Positions

The TV/SAT unit is pre-set to the current channels of the ASTRA satellite.
See yellow pages: TV Station Table of pre-programmed stations.

Television stations in the terrestrial area broadcast their programmes on their own channels.

This means that you can assign the terrestrial channels, as they are broadcast in your area, in the TV Station Table to the free channel positions, preferably 1, 2 and 3.
A further advandage: You can, for example regard a terrestrical programme and record a satellite programm, and vice versa.

In addition to the 99 + 4 AV channel positions for terrestrial and satellite reception, 38 SAT radio stations can be entered.

Re-assigning the channel positions to other stations or changing the channel sequence can easily be carried out.
For further information on this procedure see the detailed description.

There are two possible ways to "assign" the unit's channel positions:

1. With the Automatic Channel/Frequency Search

This isadvisable if you do not know the channel numbers or frequencies.

2. By Directly Entering the Channel Numbers or Frequencies and Polarisation

This is to be recommended when you know all the parameters.

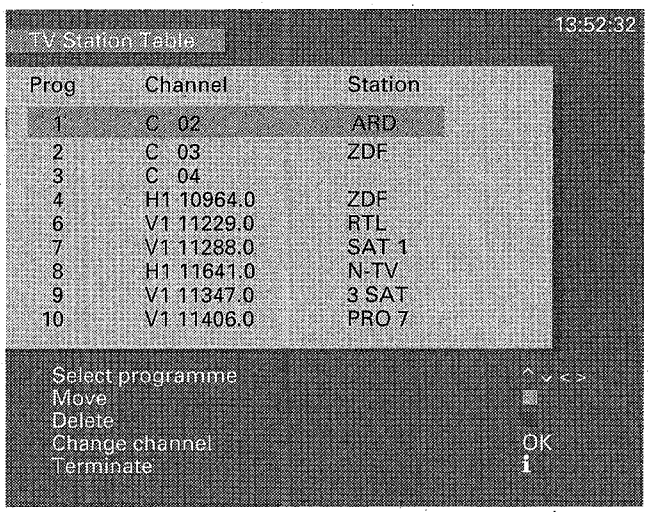
In both cases, fine tuning, adding station identifications and sorting channel positions can all be carried out in the menu.

TV Station Table

The automatic search registers all channels which can be received. If other channels are added in your reception area at a later date, these can be assigned to any channel positions in the TV Station Table. The assignment of the channel positions can be checked at any time by calling up the TV Station Table.

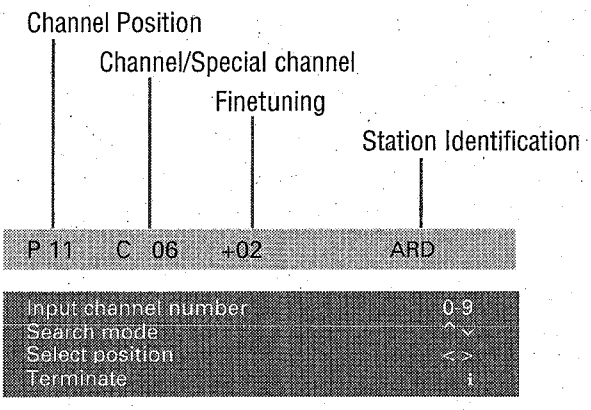
Call up the Grundig Info Center and
press P- to select the line "TVStation Table".
This line is now highlighted.

Press OK,
the TV Station Table is called up. You can select 99 TV/SAT and 4 AV channel positions.



With buttons P- or P+ select the channel position where a channel is to be stored. This line is now highlighted.

Press OK.



The menu line appearsion the screen, showing the positions for channel position, channel (special channel), – polarization and frequency in the case of SAT reception – fine-tuning and station identification.
The first channel position is flashing.
For SAT reception, the first frequency position is already preset. The second frequency position is flashing. From this position on, you can directly enter the frequency by means of the numeric buttons 0...9.

Note:

By pressing P/C you can move directly from the TV channel to this menu line and back. The selected position on the menu line flashes red.

Automatic Channel Search for Terrestrial Reception

If you do not know the channel numbers for the terrestrial broadcasting stations, start the automatic channel search.

To do this, press P- or P+.
Button P- begins a search of decreasing channel numbers, button P+ begins a search of increasing channel numbers.

The search stops at every channel which can be received. If this is not the desired channel, restart the search with buttons P- or P+.

The channel ranges C01...C72 and S01...S62 are searched. (C = channel; S = special channel).

If channel 00 or a of frequency 10700 MHz (for SAT reception) is entered and saved on a channel position, for ex. P12, then only the channel positions P1 to P11 can be selected with the buttons P- or P+.
However, this adjustment has **no** effect on input with the numeric buttons 0...9 and **does not** apply to radio operation.

Entering Channel Numbers Directly

Channel numbers can be entered directly with the numeric buttons 0...9.

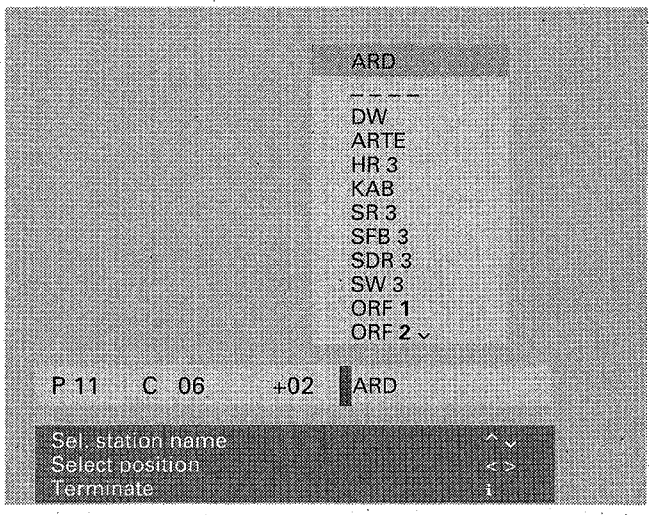
Finetuning

Your television automatically adjusts the picture to provide the best picture quality possible, in difficult reception conditions, however, it may be necessary to finetune the picture as follows:

Press ◀ or ▶ to select the position "Finetuning 00". Adjust to the best picture possible using buttons P+ (max. Fine-tuning +63) or P- (min. Fine-tuning –64).

Entering Station Identification

With button ▶ select the position "Station identification". A list of available station names or their abbreviations appears on the screen.



Press ▽ or △ to select the desired abbreviation.
Press ⓘ, the selected abbreviation is added into the TV Station Table.
If there is no corresponding station abbreviation in the list, press ▶ once to select the first position of the station identification (The list of abbreviations disappears).

Press ▽ or △ and select the desired characterl (letter or number).
To enter more characters, repeat the procedure as necessary. Note the user promts at the bottom of the screen

Press ⓘ to return to the "TVStation Table". The entered data is stored simultaneously.

Press ⓘ again to return to the TV channel.

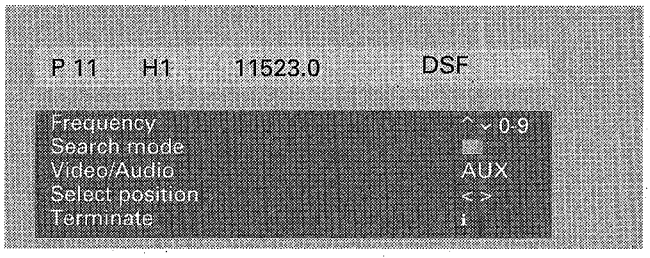
Automatic Frequency Search for SAT Reception

Your TV/SAT unit is already programmed to the current channel of the satellites ASTRA, Kopernikus and Eutelsat.
See yellow pages: TV Station Table for satellite stations.

If, however, you want to add new satellite stations or to change the channel sequence, proceed as follows:

Select the desired SAT channel position in the "TV Station Table".
Press OK.

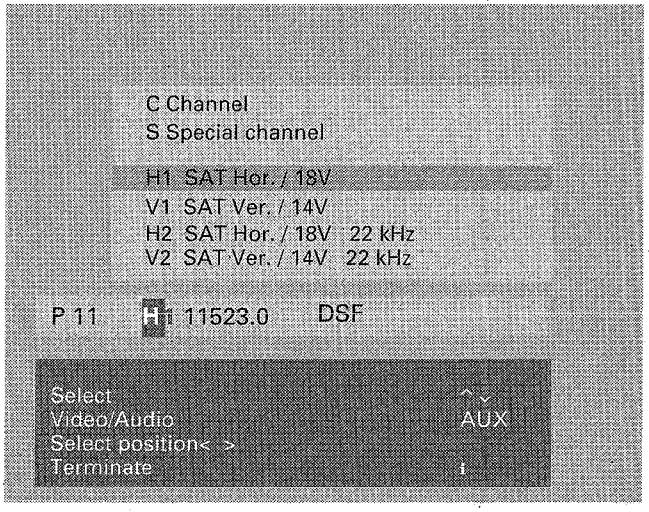
The menu line for channel position, polarization, frequency and station identification appears on the screen.



Selecting Vertical/Horizontal Polarization

The LNC power supply for "Vertical" (V1) is 14 Volts (max. 350 mA), for "Horizontal" (H1), 18 Volts (max. 350 mA).
With V2 and H2 the LNC voltage 14/18 Volts is overlaid with a sampling frequency of 22 kHz, e.g., for driving a coaxial relay (Multifeed).

Select for this from the menu line channel, polarization, frequency and station identification, using buttons ◀ or ▶, for example, "H1".



The line "H1 SAT Hor./18V" appears, highlighted in red. The polarizatiion can be selected with buttons ▽ or △. Proceed further according to the user prompts at the bottom of the screen.

Use button ⓘ to return to the TV Station table.

Adjusting the Frequency with the Automatic Search

Condition for this is that you have entered the correct LNB oscillator frequency under point "SAT-LNB-Oscillator" in the Special Functions menu.
It is also necessary that all other video/audio parameters given below have correctly been set before starting the automatic search.
The automatic frequency search is of advantage if you do not know the frequency (downlink frequency) transmitted by the satellite station.
To start the search, press the blue button ○.
The automatic frequency search begins searching increasing-frequencies. If, for example, a vertical polarization V1 has been selected, the search stops at every vertically polarized channel which can be received. If this is not the desired channel, start the search again. In this way the entire frequency range from 10700...12050 MHz, as shown in the example, can be searched for channels with a vertical polarization.
For stations with a horizontal polarization select H1 or H2 and repeat the tuning process as described.
Proceed in the same way to search further stations and store them in the the other channel positions.
So that all stations can be allocated in "ascending frequency order", start the automatic search at the last stored frequency value.

Entering Frequencies Directly

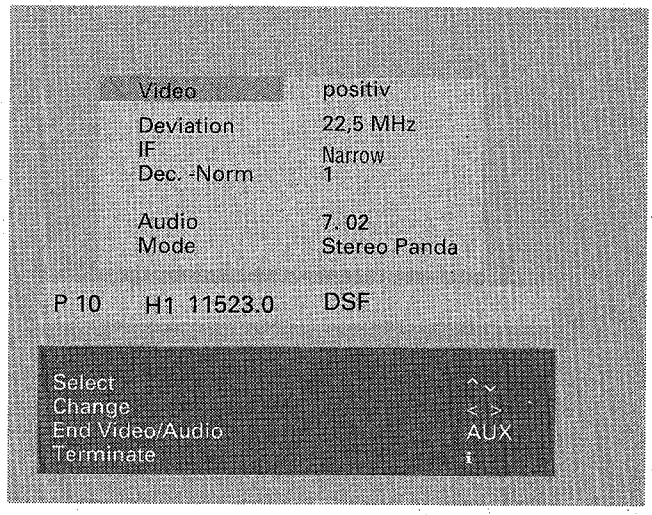
Condition for this is that you have entered the correct LNB oscillator frequency under point "SAT-LNB-Oscillator" in the Special Functions menu.
If you know the SAT frequency, you can enter it directly. For this, the first frequency place is already preset. The second frequency place is flashing.
From this place on, you can directly enter the SAT frequency with the numeric buttons ⓪...⑨. Pressing the ▽ or △ button will increase respectively decrease the frequency in steps of 500 kHz. – Finetuning! Keeping the corresponding button pressed causes the frequency to run through at fast speed. If the frequency passes below or above the range of 10700 ... 12050 MHz, the upper or lower limit frequency will automatically be indicated.

Assigning Channel Position and Station Identification

See user prompts at the bottom of the screen.

Adjusting the Video/Audio Parameters

When the frequency is set,
press AUX,
and the Video/Audio Parameters are added to the display.



Video Polarity

Select the line "Video", it is highlighted in red.
With buttons ◀ or ▶ select a "positive" video signal.
To receive the C and S band with 4 or 2.5 GHz-LNC respectively an inverted video signal is necessary and so the setting "negative" should be selected.

Video Frequency Deviation

The frequency-modulated satellite signals are broadcast with varying range of deviation. The unit must be correctly adjusted to ensure correct picture reproduction.

Select the line "Deviation".
Using buttons ◀ or ▶ a video range of 16 MHz to 22.5 MHz can be selected.

IF (IF Bandwidth)

The IF band width is shown as "wide" or "narrow". If the signal from the aerial is very weak, or if there is interference, the IF band width can be adjusted to narrow, and the picture quality is improved.

Select the line "IF".
Using the buttons ◀ or ▶ you can switch between "wide" and "narrow".

Decoder Norm

The previously adjusted mode point appears on the screen.
The signal on pin 19 of the decoder socket can be switched between:
Norm 1 = Clamped video signal (e.g., Premiere),
Norm 2 = Basis band with PAL de-emphasis (e.g., Videocrypt),
Norm 3 = Basis band with linear de-emphasis (e.g., D2 MAC Eurocrypt).
Select the line "Dec. Norm".

Switch between norm 1, 2, or 3 (best picture) with buttons ◀ or ▶.

Audio

Here the sound frequency is shown, for example 7.02 (MHz). the frequency can be changed between 5.00 MHz and 9.50 MHz in 10 kHz steps.
Select the line "Audio".
Adjust to the desired frequency with buttons ◀ or ▶.
You can enter the frequency directly with the numeric buttons 0...9.

Mode und De-emphasis

Here the current audio mode and de-emphasis are shown, for example Mono and 50 µsec.
You can select main sound carrier , subcarrier, and stereo.

Select line "Mode".
The buttons ◀ or ▶ can be used to switch between mono with a de-emphasis of 50 µsec, mono with a de-emphasis of J 17, mono Panda and stereo Panda.

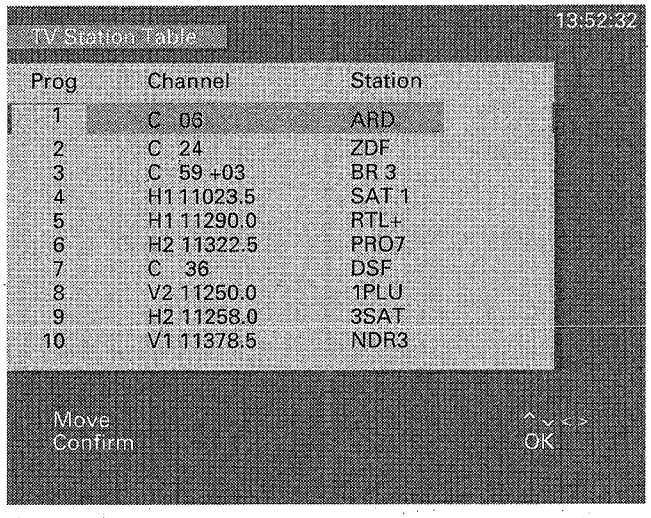
Use button AUX to leave the Video/Audio menu.

Note the user prompts at the bottom of the screen.

Changing the Channel Sequence

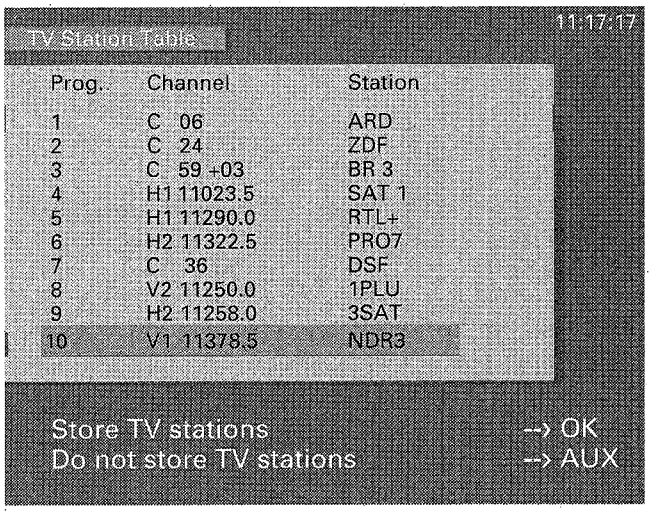
If you are not satisfied with the sequence in which the TV stations appear in the TV Station Table, this can easily be changed.

To do this, use button P- or P+ to select the channel position in the TV Station Table, for example P1, which you want to assign to a different place.
Press the yellow button and mark the channel position. All parameters are highlighted.



Select the new channel position, for example P10, with buttons P- or P+.
Confirm by pressing OK;
This channel position is new highlighted.
Press i.

If you want to **store** this sequence you will be asked by the user prompts to press OK.


TV Station Table
11:17:17
Prog. Channel Station
1 C 06 ARD
2 C 24 ZDF
3 C 59 +03 BR 3
4 H1 11023.5 SAT 1
5 H1 11290.0 RTL+
6 H2 11322.5 PRO7
7 C 36 DSF
8 V2 11250.0 1PLU
9 H2 11258.0 3SAT
10 V1 11378.5 NDR3
Store TV stations --> OK
Do not store TV stations --> AUX

The message " Store TV stations " flashes for a short time, and then you return automatically to the TV channel.
If you do **not** want to store the sequence, press AUX and the original sequence remains – return to the TV channel is also automatic.
Repeat these adjustments, if necessary, for other TV/SAT channels.

Deleting a Channel Position

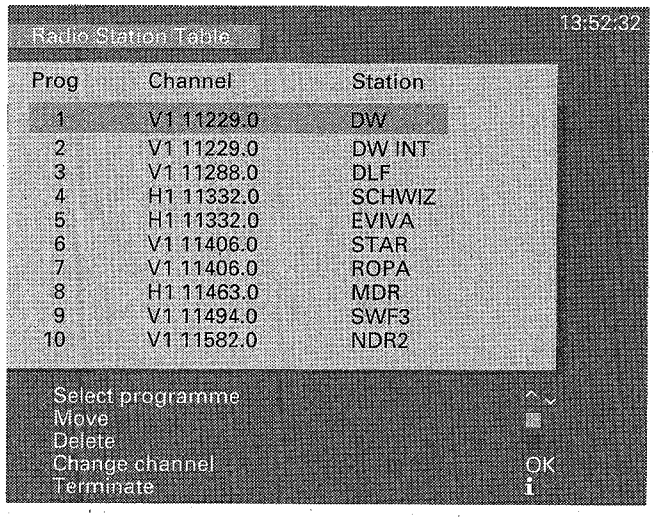
If you want to delete a channel position in the TV-Station Table, select by pressing the red button ○.
All values (parameters) are moved to the end of the tabe.
All channel positions above the deleted one automatically move one place up.
Deleted channel positions are then listed from position 99 downwards.

Radio Mode

Selecting Radio Mode

The button **R** (**RADIO**) switches between SAT/TV and SAT radio mode and back. The last station selected is automatically selected again (Last Station Memory). In SAT radio mode the screen is dark. The volume can be modified with the ◀ or ▶ button.
SAT radio mode is also indicated on the front of the unit by an LED (light diode) 6.
For optimal sound quality, the television can be connected to your HiFi system.
By pressing the button i you exit from radio mode and enter the Radio Station Table.
If you press the button ▤ while in radio mode, the television switches to Teletext mode and a page of text may be shown.
You can enter the Audio Menu directly by pressing ○▷.

Assigning Channel Positions to SAT Radio Channels



The Radio Station Table includes only pre-stored radio stations, which are broadcast by satellite, for example by ASTRA, parallel to various TV channels as sound subcarriers.
New radio stations can be stored in the Radio Station Table in the way described for the TV Station Table.
See also the user prompts.
In doing this only the sound frequency – the sound subcarrier – needs to be changed in "Audio". All other parameters can be kept.
In the case of stereo, only the lower sound frequency of the left channel needs to be entered; the right channel is then automatically stored.

Call up the GRUNDIG Info Center and use buttons P- or P+ to select the line "Radio Station Table".
Press OK and the Radio Station Table is called up.
Select the channel position by pressing P- or P+ and confirm by pressing OK.

If the desired satellite station (picture carrier) has already been tuned in, or if it has already been found by automatic searching or direct entering of the frequency – see the user prompts – press AUX, and the Audio/Video Menu appears on the screen.

Use buttons P- or P+ to select the line "Audio" and enter the frequency using the buttons ◀ or ▶ or the numeric buttons 0...9. Terminate your entry by pressing AUX.

Proceed further as described in the user prompts.

You can check the assignment of the 38 channel positions at any time by calling up the Radio-Station Table.
If you have stored a radio station and have left the menu by pressing the blue button ○, you are automatically returned to radio mode. By pressing this button again you return to TV mode.

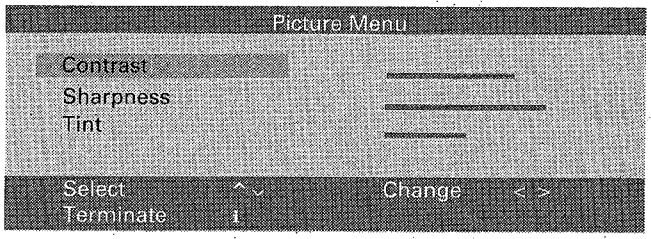
If you called up the Radio Station Table via the Info Center menu, you can return to the TV channel by pressing the button i.

Note the user prompts at the bottom of the screen!

Picture Menu

In the Picture Menu, you can adjust picture contrast and definition. When NTSC cassettes are played, or when in AV mode, the tint can be adjusted.

Call up the GRUNDIG Info Center.
The line "Picture Menu" is highlighted in red.
Press OK.
The Picture Menu appears on the screen.



Make your selection with P- or P+.
Values highlighted in red can be changed.
Change the values using the button ◀ or ▶.
The changes are automatically stored after exiting the picture menu with i.

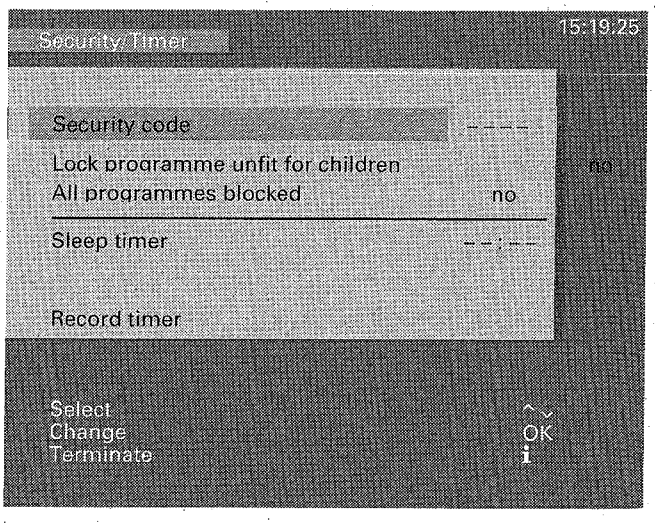
Security/Timer

Security Code

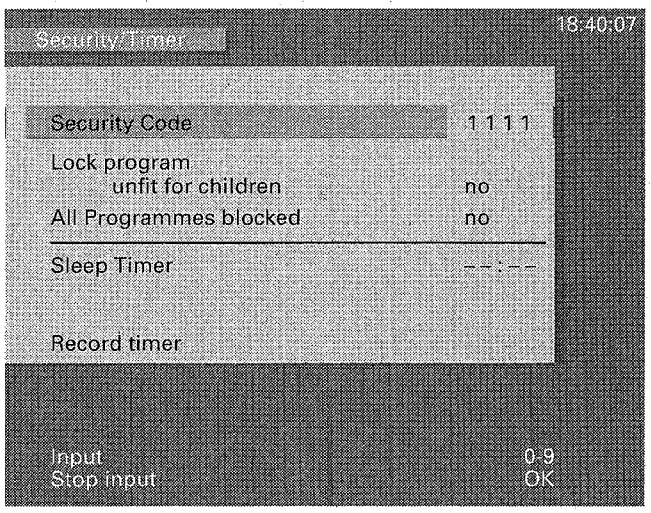
Using the programme lock (electronic combination lock), the television can be set to switch off – to stand by –, thus preventing unauthorized use.
You can select whether your television is locked for all programmes, or only for those unsuitable for children's viewing.

Call up the GRUNDIG Info Center.

Press P- or P+ to select "Security/Timer".
Press OK.
The "Security/Timer" functions appear on the screen.
The line "Security code" is highlighted in red.



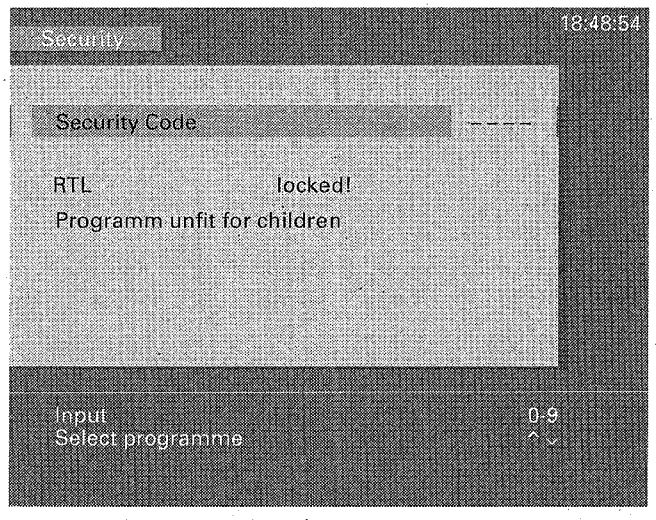
Press OK and enter a four figure personal identification code with the buttons ①...⓪, for example 1111.



Memorize your personal identification code!
If you should forget your personal identification code, refer to the key on the last page (envelope).

Press OK.
Select the line » Lock programme unfit for children «.
Select yes or no with button ◀ or ▶.
Use button ⓘ to switch to TV operation.

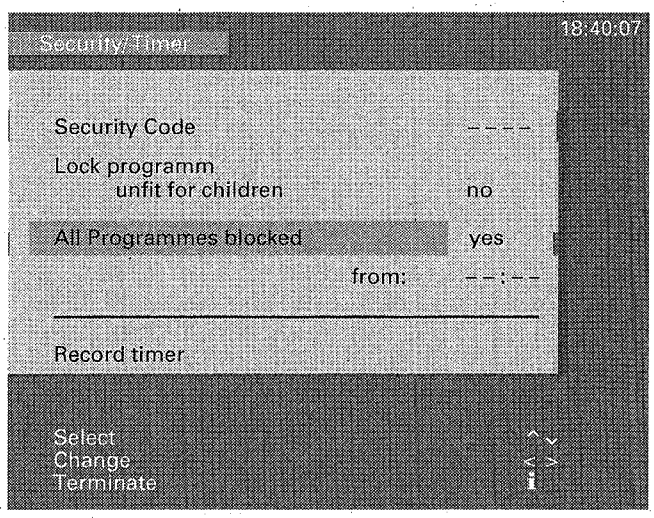
If programmes are broadcast which are unfit for children, they are affixed with extra information by the broadcasting station and your television is automatically blocked for these programmes.



After switching on, your television gives the blocked channel position or the entered station identification with the blocked channel:
Switching to TV operation, see chapter » Clearing the Programme Lock «.

Setting the Programme Lock

To block all programmes, use button P▽ or P△ to select the line » all programmes blocked «.
Press ◀ or ▶ to select yes or no.



If » **yes** «, press P▽ to select the line »from« and activate with button OK.

You can now enter the switching off time using the numeric buttons ⓪...⑨.
Use OK to terminate the input and press ⓘ to return to TV operation.

At the entered time the television automatically switches to stand by.

Clearing the Programme Lock

When the television is switched on the screen shows:

Enter the security code (your personal code) with the numeric buttons ⓪...⑨, the television automatically switches to TV operation.
When the code is entered it is not shown on the screen. The screen shows: » xxxx «.

Sleep Timer

With Sleep Timer you can enter an automatic switching off time. Your television will then automatically switch to stand by at the pre-programmed time.

Please note: If under » all programmes blocked « **yes** has been entered, then the line » Sleep Timer « **cannot** be slelected.

The line » Sleep Timer « has been selected.
Press [OK].

Using the numeric buttons ⓪...⑨ enter the switching off time in hours and minutes.

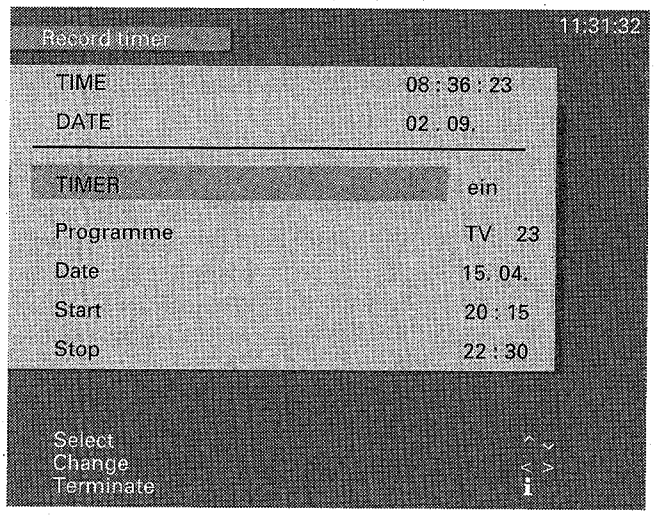
Proceed further according to the user prompts on the screen!

Record Timer

With this part of the menu it is posible to set the TV/SAT unit to switch on and off from stand by at a pre-selected time, for example to a selected SAT channel position. This enables you to make recordings with a video recorder (or radio and audio cassette) set to the same time.

Press ▽ or △ and select the line » Record timer «.
Press [OK].
The criteria for the temer recording appear on the screen.

Please check » Time and Date «!
To adjust see the user prompts.



The line » Timer « is highlighted in red.
Switch the timer on or off with the buttons ◀ or ▶.
Press ▽ and select the line » Programme «.
Press [OK],
and select TV or radio with buttons ◀ or ▶ and enter a two-figure channel position, using the numeric buttons ⓪...⑨.
Terminate the input by pressing [OK].

Next enter the date (two figures, day/month), Start and Stop times, (Hours/Min), each time terminating by pressing [OK].

Proceed further according to the user prompts on the screen
See also chapter : » Recording with the Help of the Timer «.

When the timer has been programmed, the unit should not be disconnected from the mains electricity supply for longer than two days, otherwise the data will be lost

Special Functions

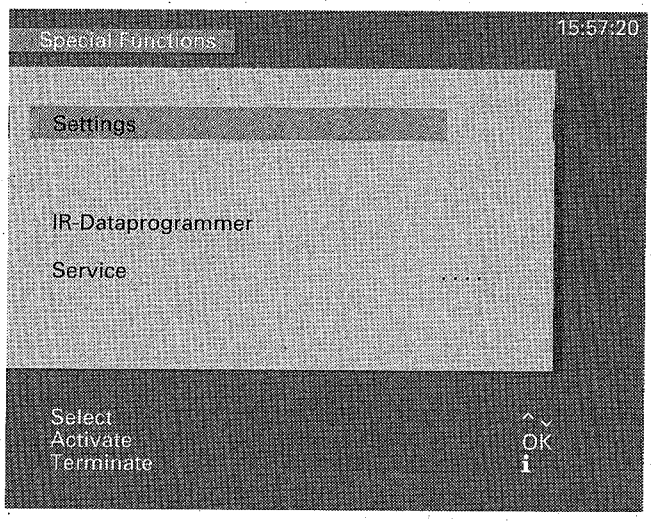
The menu » Special Functions « is divided into three menu items. In the menu » Settings «, you can carry out basic settings. The functions » IR Data Programmer « and » Service « are only for your dealer. » Service « is protected by an identification number.

Calling up » Special Functions «

Call up the GRUNDIG Info center.

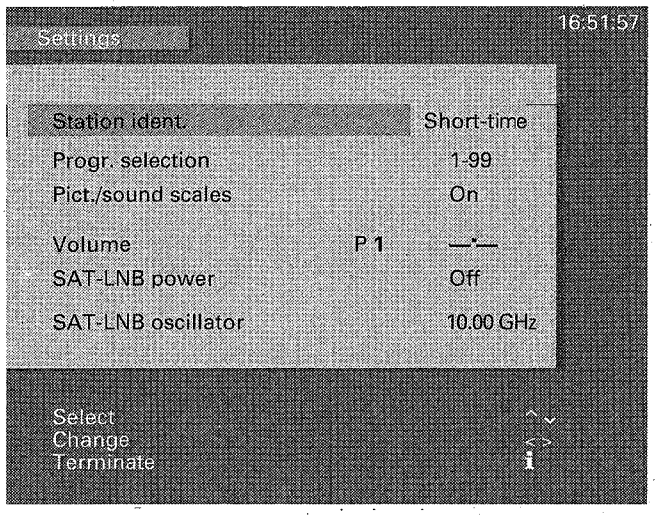
Press ▽ or △ continuously until » Special Functions « is highlighted in red.

Press [OK].
An overview of » Special Functions « appears.



Calling up the Settings Menu

Press OK
The "Station ident." line is highlighted in red.



Use button ◀ or ▶ to select whether the Station Identification appears on the screen temporarily, permanently, or is removed from the screen.

Proceed further according to the user prompts at the bottom of the screen!

One- or Two-Place Channel Selection

Call up the Settings menu and select the line "Programme Selection".

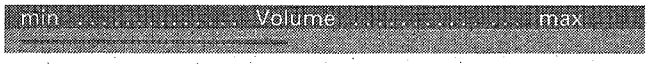
If you have assigned less than 10 channel positions you should limit the programme selection to between 1-9.
Change the setting (1 ... 9 or 1 ...99) with ◀ or ▶.
Press ⓘ to return to your current TV channel.

This setting has no effect when the channel position is selected with ▽ or △.

Picture/Sound Scale

Call up the Settings menu.

Select "Picture/Sound scale" with ▽.
Using ◀ or ▶, select which scale you wish to see, for example.



Press ⓘ to switch back to TV mode.

Changing the Volume of a Channel Position

If you receive a channel whose volume is much louder or lower than others, the volume of this channel can be adjusted.

Call up the Settings menu.

Select "Volume" with ▽.
Use ◀ or ▶ to change the volume. Only the volume of the channel currently being viewed is changed.

Press ⓘ to return to your current channel.

SAT-LNB Power

If several users are connected to one common satellite system, switch off the LNB switching voltage (14/18 Volts).

If you are using the TV/SAT unit directly as a single user via a Multiswitch or a satellite aerial, switch the voltage on.

Call up the Settings menu.

Use ▽ to select the line "SAT-LNB power«.
With ◀ or ▶ switch the LNB voltage on or off.

Press ⓘ to return to your current channel.

LNB-Oscillator Frequency Preselection

Statio programming is only correct if the LNB oscillator frequency has been correctly preselected.
The unit accepts two settings: 9.75 and 10 GHz. Only with the correct setting it is ensured that the indicated reception frequency corresponds with the satellite frequency.
For reception from Astra 1D, for example, it is absolutely necessary to select an oscillator frequency of 9.75 GHz.

Call up the Settings menu.
Use ▽ to select the line "SAT-LNB oscillator".
With ◀ or ▶ switch the LNB oscillator frequency to 10 GHz or 9.75 GHz.

Press ⓘ to return to your current channel.

If **not an LNB** of 9.75 or 10 GHz is to be used, setting of the reception frequency must be carried out according to the following example:

1. Generally, preselect an LNB oscillator frequency of 10 GHz.
2. Substract from the SAT transmission frequency of the corresponding transmitter, e.g., **11494 MHz** for ARD, the oscillator frequency of the used LNB, e.g., **10259 MHz**. The frequency difference (**1235 MHz**) corresponds to the 1st FI available at the LNB output and must be entered at the second position of the 5-digit frequency value.
   The first figure of this value has no signification.

IR-Data Programmer

This function is used to programme the TV/SAT unit automatically with terrestrial broadcasting stations.
This can only be done by your dealer with an IR-Dataprogrammers.

Service

Only for your dealer!

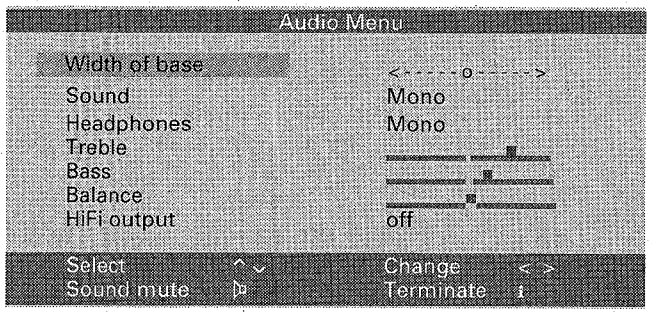
The Service menu is only for dealers and is protected by an identification number.

Sound Adjustments

... in the Audio Menu

Calling up the Audio Menu

Press ○▷,
the Audio menu appears on the screen.
The line "Width of base" is selected.



You can exit the Audio menu after any adjustment by pressing ⓘ.
This adjustment is then automatically stored.

Width of Base

This enlarges the stereo base during stereo transmissions and improves the sound of mono transmissions.

Adjust with ◀ or ▶.

Sound (stereo, two-channel sound, mono)

If your television is able to receive two-channel sound terrestrial transmissions, for example when a film is broadcast with the original sound track on sound channel 2 and the synchronized version on sound channel 1, you can select the version you want to hear by

pressing P- or P+ to select the line "Sound" and then pressing ◀ or ▶ to select the appropriate sound channel.

Individual sound channel selection is also possible with Headphones.

Your television automatically switches to stereo if the programme is transmitted in stereo.
If the stereo reception is of insufficient quality, you can switch to mono with ◀ or ▶.

The sound can also be altered without calling up the Audio Menu (only with terrestrial stations, stereo, and two-channel sound transmissions)
by pressing first AUX and then ○▷.

With SAT stations the sound setting is shown as it has been set in the SAT Menu "Audio".

Treble, Bass and Balance

The sound can be adjusted according to your individual taste.
Select "Treble", "Bass" or "Balance" with P- or P+.
Adjust with ◀ or ▶.

Hifi Output

You can choose between "off", "linear" and "controlled".

linear = Constant volume level for hifi systems. Adjustments can only be made on the hifi system.
The television speakers are off

controlled = Volume adjustments with the remote control handset.
The television speakers are off.

off = Normal

Select the line "HiFi output" with P- or P+.
Adjust with ◀ or ▶.

Exiting the Audio Menu

Press ⓘ.

Switching Off the Sound

Press ○▷ to enter the Audio menu.
Press ○▷ again,
the television sound is switched off, "Sound off" appears on the screen.
By pressing ○▷, volume ▶ or by changing the channel the sound can be switched back on.

All picture and sound scales can be switched on or off as you wish.

See GRUNDIG Info Center "Settings"!

Picture Adjustments

Adjusting Contrast and Sharpness

Contrast and sharpness can be adjusted as described in the GRUNDIG InfoCcenter under the heading "Picture Menu".

The television is tested with maximum constrast to check the reliability of all components.
However, it is advisable to reduce the contrast a little, independent of the unit's position and the ambient brightness, in order to attain the best possible picture.

Adjusting the Brightness and Colour Contrast

Press – or + on the appropriate rocker button (☼, ◑) until the desired value is reached.

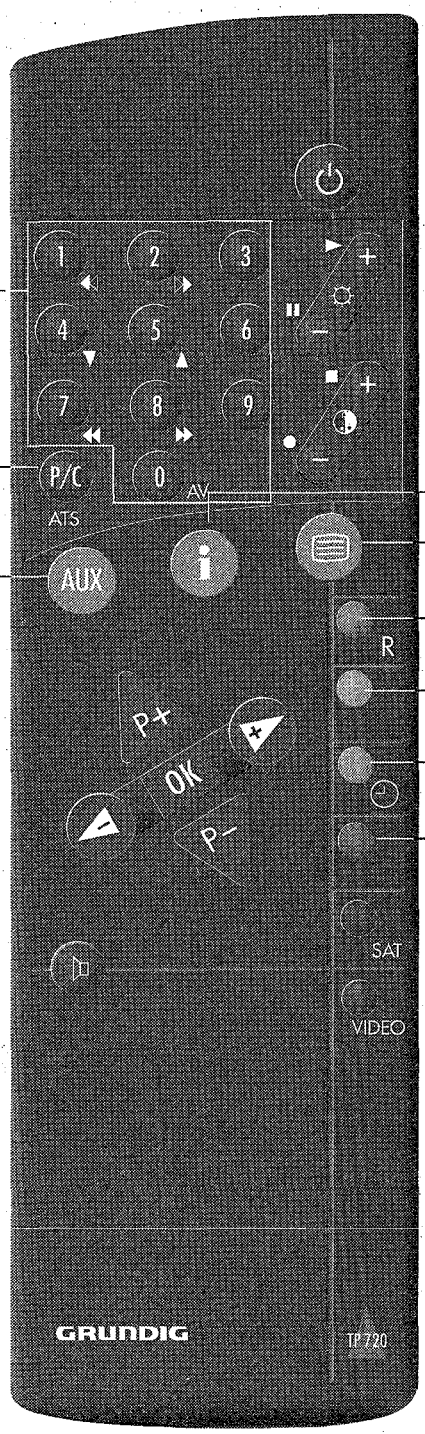
For brightness ☼.

For colour contrast ◑.

The appropriate scale appears on the screen and the changed value is shown.

With this receiver, the values you have adjusted for contrast, sharpness, brightness, colour intensity, and volume are automatically stored in memory when switching the unit off or to standby.
If these values should accidentally be turned down to a value making it impossible to get a reasonable picture and sound impression, the unit automatically selects the factory-preset basic settings when switching it on again.

Remote Control Buttons in Teletext Mode

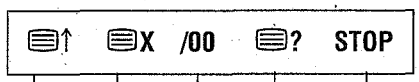


①...⓪ Page selection 100-899

Ⓟ/Ⓒ Return to previous page

Call up dialogue lines: Ⓐ

Dialogue line:



Increase character size

Bypass waiting period (current mode)

Sub-page direct call-up

Response release

Page STOP

Select functions with ◀ or ▶.

Call up with OK.

ⓘ Call up contents page.

Teletext mode ↔ TV mode

○ (blue) Switches to next block

○ (yellow) Switches to next group with overrun to the next block

○ (green) Switches to next page with overrun to next group

○ (red) Scroll back

Fastext (Flof)

The coloured buttons are for the topics listed in the dialogue lines

Teletext Mode

General

Teletext is a service offering extra information which is broadcast together with the television signal by the television station.

With a teletext decoder built into your television set you can call this information onto your television screen.

Teletext is broadcast in the form of texts, graphic representations and subtitles for television programmes.

The subtitles are a service for people with hearing disabilities.

By means of information pages and dialogue lines, your television offers you easy operation. The information in the dialogue lines indicates the various functions available as well as the buttons provided for these functions.

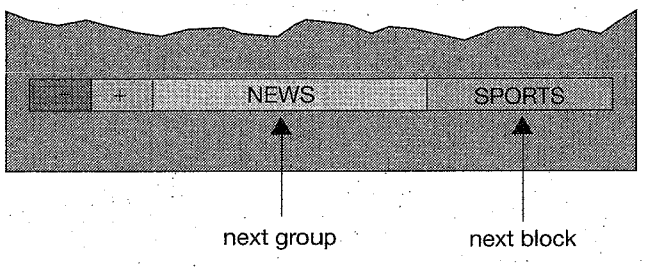
TOP-FLOF Teletext

TOP and FLOF are recent innovations which simplify and accelerate the selection of teletext pages.

TOP and FLOF allow you to select teletext pages without knowing their page numbers. TOP and FLOF do this by arranging all the pages according to topics – also called blocks – similar to a filing cabinet.

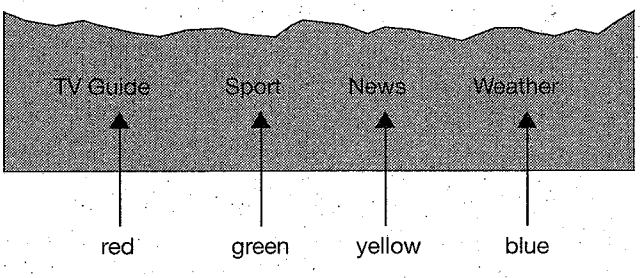
For example, all news items are listed under » News «. Further topics include » Sports «, » TV Programmes « and » Services «. In TOP teletext mode these blocks in turn are divided into several groups; » News «, for example, is divided into politics, economics and culture. The normal teletext pages are found within these groups.

The user guide on the screen makes using TOP and FLOF extremely easy. A comment line in different colours is shown at the bottom of the screen. The colours are identical to the ones on the remote control. In TOP teletext mode the yellow field indicates which block has been selected as well as the following group, while the blue block indicates the next block.



You switch from block to block with the blue button, from group to group with the yellow button, and you scroll forward with the green button. The red button returns you to the previous page of a group or block.

In FLOF mode the choice of topics appears in coloured lettering. The coloured buttons on the remote control allow you to select the topics shown on the screen.



TOP and FLOF take you quickly and reliably to the teletext page you want.
If no TOP or FLOF teletext is being broadcast, a red bar with a – and a green bar with a + appear in the comment line.

Note

If the aerial signal is only marginal, teletext pages may exhibit disturbances. If fine-tuning the telvision brings no improvement, have your aerial system checked.

What You Should Know

The teletext mode » TOP « requires certain additional information from each television station. For this reason, always wait a few seconds for the TOP decoder to read the required information into its memory after switching the television on or changing to a different channel.

With the ⊜ button, you can return immediately to normal television viewing from any mode.

Always note the user prompts at the bottom of the screen.

Teletext Mode

Operation

Use the numeric buttons ①...⓪ to select the channel whose teletext pages you would like to call up.

Switching Teletext On/Off

Press the ▤ button on the remote control.

Page 100 (the teletext page of contents) appears.

Press the ▤ button to switch teletext off.

TOP Mode

A red, green, yellow and blue field is shown at the bottom of the screen. Buttons of the same colours are found on the remote control.

With the red button ❍ you scroll back one page.

With the green button ❍ you scroll to the next available page (with overrun to next group).

With the yellow button ❍ you switch to the next group. After the last group of the selected block, you are automatically taken to the next block (overrun).

With the blue button ❍ you switch from block to block.

Calling Up Pages

Enter a **three-figure** number for the desired page, using the numeric buttons ①...⓪.
The page number appears at the top of the screen and the page appears after a short time.

The page with the next page number can be called up with the **green** button **(current page number +1 page)**
or
the previous page can be selected with the **red** button **(current page number -1 page).**

If the selected page contains no text, the screen shows » not available «.
Select the infopage 100 or enter another three-figure number.

With the P/C button you can select the previous page.

Page Catching

This function allows you to select a page without entering the corresponding page number.

You can select specific teletext pages from the overview pages (pages designated with a three-figure number).

Press the P- or P+ buttons
» Page-Catching « appears in the upper part of the screen. A highlighted square (cursor) blinks on the first or last page number of the overview.

Using the P- or P+ buttons, move the cursor to the desired page number.
Press OK.
The desired page appears on the screen.

Programme Preview

This is used to switch directly to the programme preview of the station you are currently watching.

Press ⓘ.
Page 100 appears.

Press ⓘ again.
The programme preview block appears.

Press ⓘ again.
The contents page (page 100) appears.

In FLOF mode this funtion takes you to the contents page selected by the station.

Multiple Pages/Page Stop

Several subpages can be conbined under a single page number which are then automaically scrolled at an interval determined by the television station.
This is indicated by, for example, 3/6 under the time, which indicates that you are looking at the third of six subpages.

If you want to look at a page for longer than the predetermined time, press

the AUX button.
The dialogue line appears on the screen.
With ◀ or ▶ select the symbol STOP.

Press OK
the word » STOP « appears on the screen. The content of the page currently on the screen has now been » frozen «, cannot be changed and the next subpage does not appear.

Press OK,
the » STOP « function has been released and the current subpage appears.

Teletext Mode

Calling Up Subpages Directly

Press AUX (the dialogue line appears).
Press ◀ or ▶ to select the symbo /00.

Press OK
The selected number, for example,

− + S155 / 0000

appears in the info line.

Using the numeric buttons, enter the four-figure subpage number. For example, the second page, sequence 0002. The desired subpage is sought and diplayed.

Press OK,
the function is cancelled.

Increasing Character Size

Press the AUX button (The diologue line appears)

Select ☰↑ with the buttons ◀ or ▶.

Repeatedly pressing the OK button doubles the character size in the following order:
upper half of the picture,
lower half of the picture,
return to normal picture.

Answer Release

This function can be used on certain teletext pages to solve puzzles given during a televised programme, for instance, or for programming a video recorder via VPS pages.

Press the AUX button. (The dialogue line appears)

Select ☰? with the ◀ or ▶ buttons.

Press OK,
the hidden information becomes visible.

Press OK,
the » Answer « function is cancelled.

Current Programme/Subtitles

(only for station which provide teletext service)

In the TV mode, press the red button. The current programme and subtitles appear, highlighted in blue and yellow.

Press the yellow button.
» Searching programme « appears at the top of the screen When the programme has been found, the time, the title of the current programme, and the beginning of the current and following programme appear.

Press the blue button.
» Searching subtitles « appears at the top of the screen. When the subtitle have been found, they appear on the screen.
If the programme has no subtitles, » Subtitles not available « appears on the screen.

Press the red button to cancel this function.

Television Viewing During Teletext Operation

Updating Pages – Bypassing the Waiting Period

Certain teletext pages are constantly updated, such as stock market reports and sporting events, as well as the latest news.

If you want to watch television and nevertheless remain informed, first select a page of your choice, and then

press the AUX button (the dialogue line appears).

Select ☰X with the ◀ or ▶ buttons.
Press OK.

The programme is still visible for viewing, and at the top of the screen, the teletext symbol appears.
When the teletext page has been found, and the message » ready to call up « appears, press OK.
The updated teletext page appears.

You can also use this function to bypass waiting periods while the teletext decoder searches for a page.

Connection Capabilities – Record mode via the blue Euro-AV socket

Direct Recording

By pressing the AUX button and then the brightness button ⊕ you can record the current programme on VCR. During this recording process, only stations broadcasting on the other level (terr. or sat.) can be viewed. » Record on « appears on the screen. If you have previously activated a different record mode, the screen shows » Record active New Record → OK «.
By pressing the OK button, you can record the new programme, otherwise the previous record mode remains active.
This mode is cancelled by pressing the AUX button and then the colour contrast button ⊕.
If you switch to stand by during the recording process, the copy mode is terminated. To continue recording in this case, press first AUX and then stand by. » CO « appears on the display.

Recording with the Aid of the Remote Line

Via the remote line (Cinch-socket) a suitably prepared GRUNDIG video recorder can start the recording operation. The video recorder informs the television of the channel position via this line. If the television was already on stand by, the picture tube remains switched off. If you are recording a SAT channel, then the channel currently being recorded always appears when the television is switched on or SAT is selected.
The actual channel position number flashes up on the display for a short time, before the display returns the previous channel position.
This also applies to copy modes.
In the case of timer recordings and the recording possibilities described, the recording operation is not interrupted by switching the television to stand by.
Caution: Timer und remote line operations have the same value, i.e. when the timer is active, recording cannot be started via the remote line.
The necessary remote line cable is available from the GRUNDIG accessories programme.

Recording with the Aid of the Timer

For setting the timer see the chapter » Timer Recording «.
To use the timer the data on the timer must be identical with those on the video recorder.
If the timer is activated while in TV mode, the television switches to the pre-programmed channel position.
» Record on « appears on the screen. If a satellite station is pre-programmed, then you can only switch between terrestrial channels.
When you select a satellite channel, the actual channel position flashes up on the display for a short time and then switches automatically to the preprogrammed channel position.
If a decoder is necessary for the pre-programmed channel position » Decoder on «, then **no other** TV channel which requires a decoder can be viewed.
When the recording is finished, » Record off «appears on the screen.
All channel are now available for viewing. Any recording operation (not copy) can be interrupted by pressing AUX and colour contrast ⊕.

Connection Capabilities and Operation...

...of Stereo Headphones

Connection

Insert the headphones jack (3.5 mm Ø) into socket.

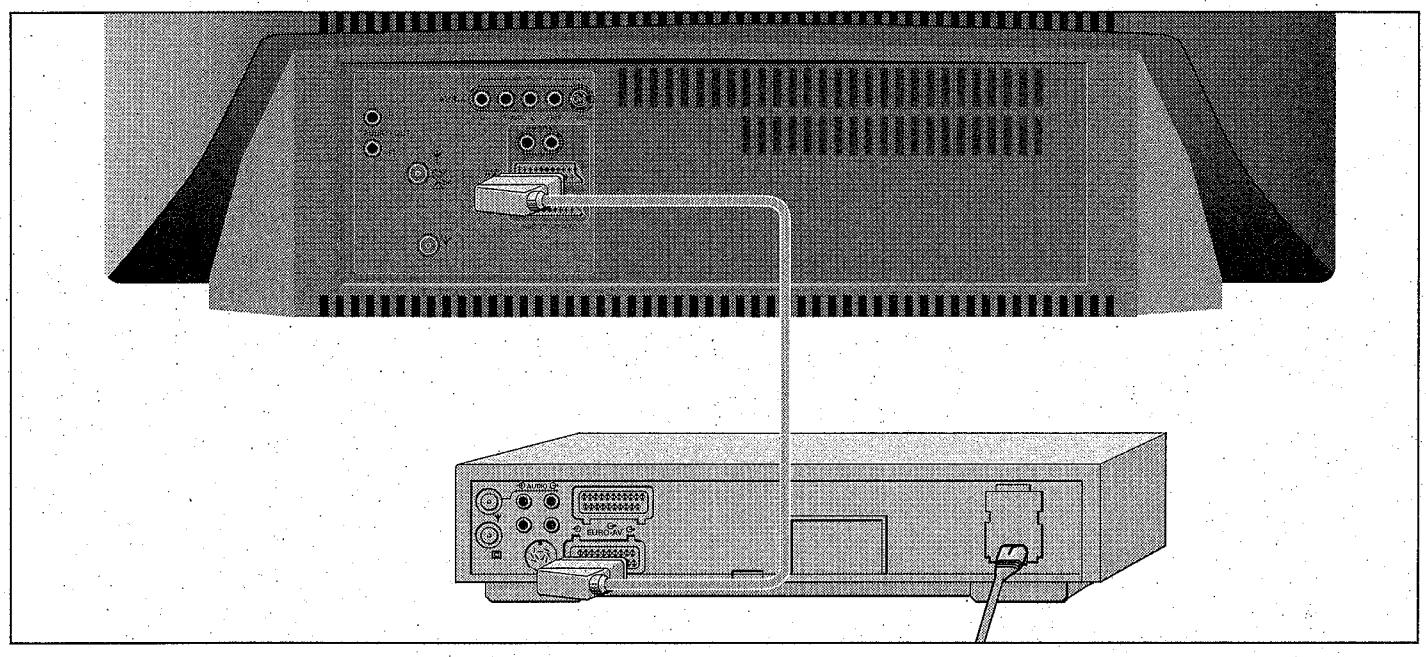
Operation

Press the AUX button, and adjust the volume with the ◀ or ▶ buttons.
The adjusted volume is displayed on a scale.

For individual sound channel selection while operating the headphones, see the Audio Menu.

Connection Capabilities and Operation...

... of a Video Recorder



Connection

With an AV cable connect the video recorder to the blue AV socket,
or connect it to the aerial socket using an aerial cable (75 Ohm).

Video Recorder connected to the blue Euro-AV socket AV2

Press the 0AV button repeatedly until A2 appears on the screen. Start video recorder playback.

Video Recorder connected to the black Euro-AV socket AV1

Press the ⓪AV button repeatedly until A1 appears on the screen.
Start video recorder playback.

The picture/sound signal of the video recorder which is connected to the black EURO-AV socket can be assigned (switched) to any channel position (see "Connection of a decoder")

Attention! If you wish to record scrambled (coded) transmissions, the decoder should be connected to the black AV1 socket and the video recorder to the blue AV2 socket.
If the video recorder is connected to the AV1 socket, recording might be distorted when changing the programme.

Video Recorder connected to the aerial socket

Assign the playback channel specified by your video recorder (between C30 and C40) to any channel position (for example, P16) (see the chapter "Assigning Channel Positions Manually").

If you enter the abbreviation AV as station identification for this channel position, then any deviations from the recorder's playback channel are neutralized by the television.

If you do not know the playback channel of your video recorder, start playback and search for the channel using the television's manual search option (see chapter "Assigning Channel Positions").
Remember the channel position for subsequent video playback.

Video Recorder Remote Control

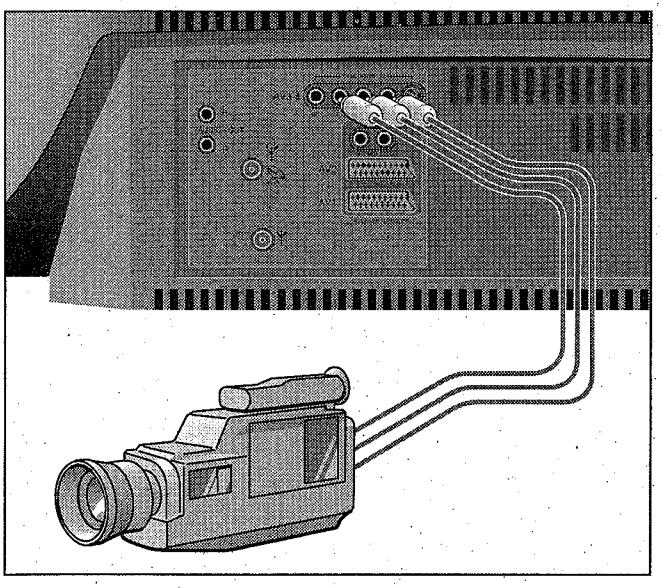
The remote control unit of the television can also be used to operate Grundig video recorders. Information about remote control compatibility can be gained from your dealer.

Press the ○VIDEO button and keep it depressed.
This switches the remote control to video recorder mode.
Now press the appropriate button.
From the following table you can see which recording functions are activated by which buttons.

◀◀ (Numeric button 1) = Reverse picture search
▷▷ (Numeric button 2) = Forward picture search
● (Button – ◑) = Start recording
■ (Button ◑ +) = Stop
◀◀ (Numeric button 7) = Fast rewind
▶▶ (Numeric button 8) = Fast forward wind
II (Button – ☼) = Pause
▶ (Button ☼ +) = Start playback
▼ (Numeric button 4) = Channel position –
▲ (Numeric button 5) = Channel position +

Connection Capabilities and Operation...

...of a Camcorder



Connection

Picture signal

With a suitable cable, connect the FBAS socket to the corresponding picture socket on the camcorder.

Camcorder with mono sound

Connect socket L to the sound socket on the camcorder.
Press the ⓪AV button repeatedly until A3 appears on the display.
First press (AUX) and then press ◯▷.
» Mono A« appears on the screen.

Camcorder with stereo sound

Connect the sockets L and R to the sound sockets on the camcorder.

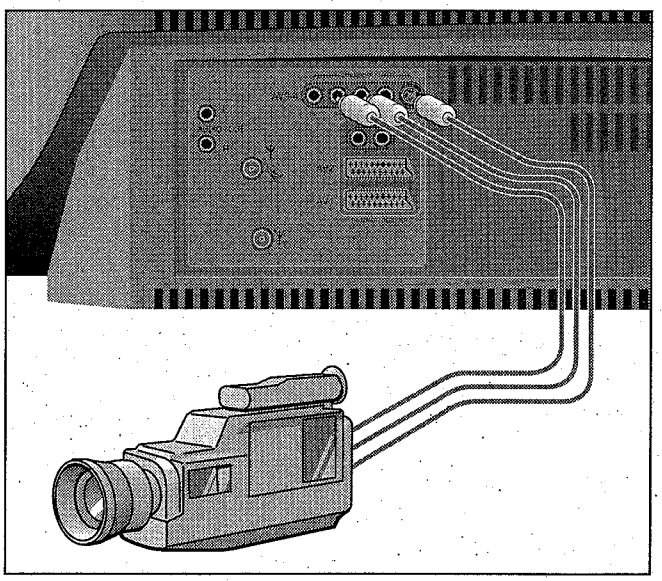
The S-VIDEO socket must be left free.

Operation

Press the ⓪AV button repeatedly until A3 appears on the display.

Start camcorder playback.
The camcorder playback can be viewed on the screen.

...of S-VHS-Video Recorders, S-VHS Cameras or Hi 8 Camcorders



Connection

Picture signal

With a suitable cable, connect the S-VIDEO socket to the corresponding picture socket on the camcorder.

Camcorder with mono sound

Connect socket L to the sound socket on the comcorder.
Press the ⓪AV button repeatedly until A4 appears on the diplay.
First press (AUX) and then press ◯▷.
» Mono A« appears on the screen.

Camcorder with stereo sound

Connect the sockets L and R to the sound sockets on the camcorder.

The FBAS socket must be left free.

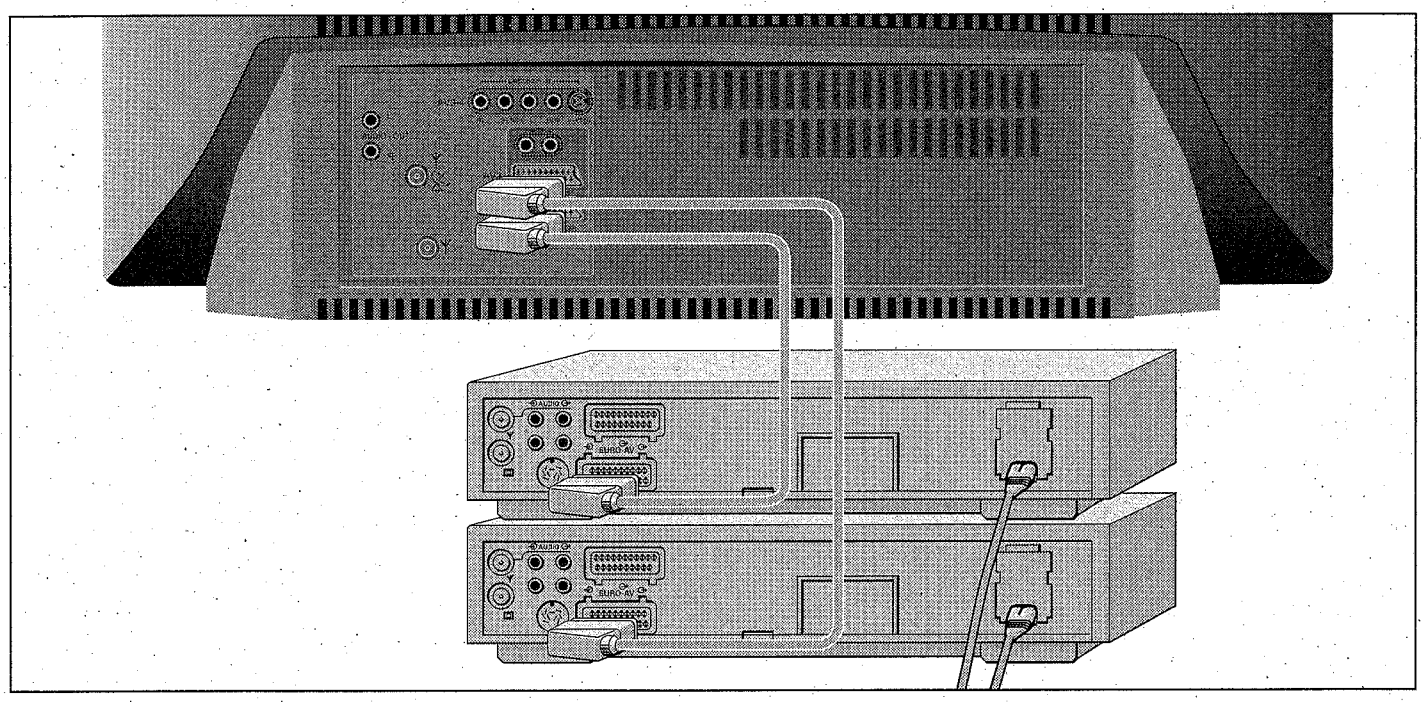
Operation

Press the ⓪AV button repeatedly until A4 appears on the diplay.

Start camcorder playback.
The camcorder playback can be viewed on the screen.

Connection Capabilities and Operation...

... of Copying Recordings via the Television (CopyMode)



You can record from one video recorder to another, or from a camcorder to a video recorder, or from a S-VHS video recorder to another video recorder.

Transfer from	→	to
AV1 (black)	→	AV2 (blue)
AV2 (blue)	→	AV1 (black)
AV3 (FBAS)	→	AV1 (black) und AV2 (blue)
AV4 (S-VIDEO)	→	AV1 (black) und AV2 (blue)

The 4 AV positions can be called up in the TV stations Table at the end of the 99 channel positions and can each be given an » identification «.

Note the user prompts at the bottom of the screen.

Connection examples

Connect the playback recorder or the comcorder to the black EURO AV socket. Connect the camcorder to the cinch FBAS sockets, connect R in L.
Connect the S-VHS camera o the Hi8 camcorder to the S-VIDEO socket, R IN L.

Connect the recording video unit to the blue AV socket.

Operation

Select the input socket with the ⓪AV button.

AV1 = Euro-AV socket (black); display A1
AV2 = Euro-AV socket (blue); display A2
AV3 = FBAS socket, display A3
AV4 = S-VIDEO socket, display A4

For AV3 and AV4 the sound must be separately connected via the cinch sockets.

Press the AUX button and then the ⓪AV button.
» Copy on « appears on the screen.
You are now free to watch any channel on your television without disturbing the recording. This does not include stations for which a decoder is necessary!

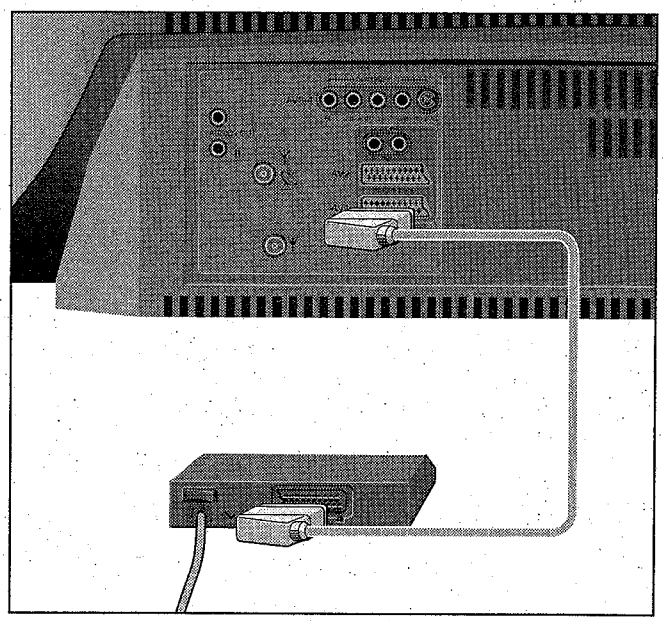
To cancel the » Copy on « function, press the button ⓪AV, select the AV position from which playback (transfer) was given.
Press the AUX button and then the ⓪AV button
» Copy off « appears on the screen.

Copying in Stand By Mode

During all copying operations the television can be switched onto stand by.
This saves energy.
Press the AUX and ⏻ buttons
» CO « appears on the display.

Connection Capabilities and Operation...

... of a Descrambler (Decoder)



Some stations broadcast their programmes in scrambled form, which means the picture and sound are unrecognisable. With a descrambler (decoder) you can unscramble such programmes.

Connection

Connect the descrambler (decoder) to the black EURO AV socket and switch it on.

Operation

On the television select the channel position with the scrambled channel.

Press the buttons AUX and 0 AV,
And the current setting appears on the screen.

By repeatedly pressing the 0 AV button during fading in, the following functions can be selected:

» Decoder off « (Switching voltage is not utilized).

For SAT stations and » Decoder on «.
This setting is for decoders which do not provide any switching voltage. The unit necessarily takes the signal from AV1. **If there is no signal connected to AV1, the picture tube is dark.**
For terrestrial stations and » Decoder on auto «. The decoder is switched on or off according to the switching voltage.

Automatic switching of sound reproduction-mono/stereo/two-channel sound. The switching depends on the television broadcast being received via the aerial.

» Decoder on Stereo «.
If extra systems are connected – to the black EURO AV socket – the left sound channel and the right sound channel are relayed to the speakers.

» Decoder on Mono-L «.
On mono-L the left sound channel is relayed to both speakers.

» Descrambler on Mono-R «.
On mono-R the right sound channel is relayed to both speakers.

The scrambled channels (signals) are sent from the television to the decoder, are descrambled, sent back to the television where they can be viewed in their descrambled form.
The channels can also be recorded with a video recorder via the blue AV socket. If a channel position is occupied by another station, for which a decoder is not suitable, press the AUX button and then the 0 AV button repeatedly unti lthe message » Decoder off « appears.
The message » AUX «, however, appears for only a short time. Press the 0 AV button, when the message diappears you return to the previously selected AV position.

Technical Data

Mains voltage:

220–240 V, 50/60 Hz
(Power supply control range 190 ... 264 V)

Power consumption:

approx. 125 W
In stand by 5 W

Channel coverage:

C01 ... C72
Special channels S01 ... S62
SAT Frequency range 910 ... 2050 MHz

Sound output:

50W active musical output (25 W Sine = 2 x 6.25 W + 12.5 W)

Service Note for the Dealer:

This device is provided with a pluggable power supply cable. For replacements, contact the nearest customer service centre and always quote the following order number.: 8290-991-307.

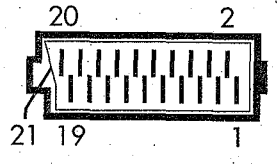
This device conforms to VDE safety regulations and directives of the Deutsche Bundespost (German Federal Post Office; see certification mark on the type sticker on the rear of the device), as well as all relevant ordinances governing X-ray emissions. The picture tube, which emits X-rays, is sufficiently shielded and therefore represents no danger. Accelerating voltage is max. 32 kV/ with a mean beam current of 1.5 mA.

Unauthorized tampering with the device, in particular making adjustments to the high voltage system, or installing a different picture tube, can considerably increase X-ray emissions. Devices so altered no longer conform to applicable safety regulations and may not be operated.

EURO-AV pin assignment

If you want to connect other devices to your television (for example, a computer or amplifier), your dealer can provide you with a normed standard connection by means of the following table:

Pin		Signal
1	=	Audio output, right
2	=	Audio input, right
3	=	Audio output, left
4	=	Audio earth
5	=	Blue, earth
6	=	Audio input, left
7	=	RGB blue, input
8	=	Switching voltage
9	=	Green, earth
10	=	–
11	=	RGB green, input
12	=	–
13	=	Red, earth
14	=	Earth
15	=	RGB red, input
16	=	RGB switching voltage
17	=	Videoearth
18	=	RGB switching voltage, earth
19	=	Video output
20	=	Video input
21	=	Shielding/earth



Subject to change without notice!